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Quarterly Progress Report Covering the Period 1 October to 31 December 1979 SRI International Project 7560

NIC TECHNIQUES (U)

(Extension Contract No. DNA001-78-C-0274)

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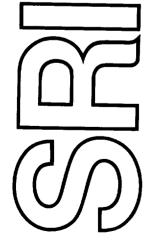
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I OBJECTIVE

The objective of this program is to investigate the phenomenon of remote viewing (RV) as an aid in assessing Soviet research and applications that would constitute a threat to the United States. The type of countermeasures and factors that inhibit RV will be investigated. The work effort will involve gathering data on specific geographic areas throughout the world and examining research pertinent to improving the reliability of the data obtained via the RV process. This research is supported and monitored by the Defense Intelligence Agency of the Department of Defense under Contract No. DNA001-78-C-0274.

II INTRODUCTION AND SUMMARY

The purpose of this program is to provide a data base for assessing Soviet threat in the area of <u>remote viewing (RV)</u>. RV is the acquisition and description, by mental means, of information blocked from ordinary perception by distance or shielding, and generally believed to be secure against such access. This includes the ability of subjects to view remote geographical locations, even at intercontinental distances, given only geographical coordinates or a known person on whom to target.

Investigations into the RV phenomenon at SRI International over the past eight years have ranged from basic research with regard to proof or the lack thereof as to the existence of the phenomenon, to operational applications where existence of the phenomenon is taken as a given. The present study, with its emphasis on application potential, leans toward the latter—extensive proof of the phenomenon is not pursued here. A measure of proof is provided, however, by the quality of results obtained in operational tests carried out under double—blind conditions.

In this report we present the results of a several-month reliability study. The purpose of this study was to delineate those factors which appear to affect the reliability of the RV phenomenon, to develop a methodology to minimize the deleterious effects of such factors, to test that methodology in a training procedure involving several RVers, and to evaluate the effects of such training on the basis of success in operational applications.

The factors affecting reliability, and the training methodology designed to improve reliability are presented in Section III. In Section III we also discuss the apparent impact on the training program on operational

applications. The results of the study to date indicate that substantial progress has been made. Finally, in Section IV we outline the potential for a broad-based integration of RV phenomena into intelligence applications resulting in a viable RV intelligence capability.

III PROGRESS DURING THE REPORTING PERIOD

The primary objective of this program is to provide a basis for evaluating the RV capability. This is done specifically to assess the potential threat from Soviet research and application in this area.

Of particular interest with regard to application is the use of an abstract targeting procedure known as coordinate remote viewing (CRV), a procedure we have had under investigation at SRI since 1972. In this procedure the target site coordinates (latitude and longitude in e.g., degrees, minutes, and seconds) are relayed with no further information to the individual who is to view the site. The remote viewer is asked simply to proceed on the basis of the coordinates alone.

Admittedly, such an abstract targeting procedure seems without basis, at least with regard to the present scientific paradigm. As a result we can make no claim for the technique other than the purely pragmatic one that it appears to work. It can only be pointed out that in psychoenergetics research in general, the possibility of success in such a protocol is in accord with an observed "goal-oriented" nature of the laws that appear to govern psychoenergetic functioning.*

In this section we discuss the findings of an investigation into CRV reliability, the factors that affect it, the development of procedures to improve it, and the results of application challenges to test it.

An investigation into the general problem of target acquisition has been carried out an reported. See R. Targ, H. E. Puthoff, B. S. Humphrey, and C. T. Tart, "Investigations of Target Acquisition," Research in Parapsychology 1979, Scarecrow Press, Inc., Metuchen, NJ, 1980.

A. Advances in Development of CRV Potentials

1. Background

Since the introduction of coordinate remote viewing (CRV) several years ago, it has been apparent that CRV is often capable of yielding highly accurate and useful data.

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There are, however, several instances of failures, in which the CRV description did not correspond to ground truth reality. Since one of the program tasks is to "continue the investigations of methods to improve the phenomena," a special study program was set up to attempt to determine the factors that affect CRV reliability, and, to the degree possible, to develop procedures to minimize the deleterious effects of such factors.

It was recognized at the outset that there were two facets of the reliability problem that were of interest and would therefore have to be addressed:

- (1) Vertical Potential. Given that an individual exhibits a demonstrable CRV ability, is it possible to develop that ability beyond a neophyte status, that is, increase the signal-to-noise ratio?
- (2) Horizontal Potential. Does the CRV process possess a structure sufficiently definable to imply a meaningful construct for transfer/trainability across a broad base of individuals, potentially providing increased reliability on the basis of cross correlation of multiple CRV responses?

H. Puthoff and R. Targ, "Advanced Threat Technique Assessment (U)," Final Report, SRI Project 5309, SRI International, Menlo Park, CA (October 1978), SECRET.

Task 2.4, DIA(DT) Statement of Work dated 28 March 1979 (SECRET, DNA-79-04633).

Results of the study program to date, described below, indicate progress in both areas.

2. Signal/Noise Characteristics

The anatomy of the CRV phenomenon has been under intense scrutiny at SRI in an effort spearheaded by remote viewer #002. These explorations have centered about two areas:

- (1) Observing and understanding the characteristics of the noise.
- (2) Observing and categorizing the characteristics of the signals.

With regard to the <u>noise</u> aspect of the CRV channel, the process of mapping out its characteristics has consumed a large part of a two-year effort to isolate the factors involved. Four major categories of noise have been delineated in this process. They are:

- Analytical Overlay. As the remote viewer becomes aware of the first few data bits, there appears to be a largely sponteneous and undisciplined rational effort to extrapolate and "fill in the blanks."

 This is presumably driven by a need to resolve the ambiguity associated with the fragmentary nature of the emerging perception. The result is premature internal analysis and interpretation on the part of the remote viewer. Example: An impression of an island is immediately interpreted as Hawaii. To circumvent this, a procedure for disciplined rejection of premature interpretations and conclusions is called for.
- Associational Overlay. In addition to provoking premature interpretation, the incoming data bits appear to stimulate pre-existing mental formations that are associationally related to the target material. Example: An impression of a round object triggers an image of a favorite childhood ball. The triggering of such associational overlays leads to imaginative images that divert or embellish the picture

- being built up from the incoming data bits. To overcome the effects of this type of overlay, training to recognize and discriminate against associational images is required.
- (3) Monitor Overlay. This is comprised of noise intruding into the remote viewer's awareness inadvertently as a result of undisciplined talk or actions on the part of the session monitor. Examples cover a broad spectrum, ranging from, e.g., stimulation of sailboat images by a casual pre-session discussion on sailing, to the subtle reinforcement (e.g., by body language) of certain responses that match the monitor's biases and preconceptions as to the nature of target; in short, any action on the part of the monitor that degrades the remote viewer's attentiveness to the task at hand. To bring this under control, a standardized monitor behavior must be introduced in which, for example, the monitor is restricted to the use of certain standard phrases during his monitoring of a CRV session.
- (4) Environmental Overlay. This type of overlay has its source in the physical surroundings of the CRV session. Specifically, conditions of the session chamber (e.g., obtrusive shapes, sounds, visual highlights) are found to insinuate themselves into the CRV response. A mundane example: an afterimage produced by a strong vertical line in the session chamber can lead to a predominant vertical line in the "target" image. More esoteric examples involve peripheral and subliminal perception of environmental features, since, as is known from the study of subliminal perception, information not processed at a conscious level can nonetheless infiltrate perceptual and thought processes. Environmental overlay can be minimized by judicious control of environmental factors, such as by providing a quiet, dimly lit, relatively homogeneous monochrome visual field absent of strong features and peripheral clutter.

Although the latter overlays can be dealt with by controlling elements in the environment of the remote viewer, the analytical and

associational "fill-in-the-blanks" overlays stem directly from cognitive processes within the remote viewer. Our investigation of these overlay patterns leads to a model of RV functioning shown schematically in Figure 1. With the application of the "stimulus" (e.g., the reading of a coordinate) there appears to be a momentary burst of "signal" that enters into awareness for a few seconds, and then fades away. The overlays appear to be triggered at this point to fill in the void. Success in handling these complex processes apparently requires that a remote viewer learn to "grab" incoming data bits while simultaneously attempting to control the overlays. A strict and disciplined methodology to perform this delicate and difficult task, involving repeated coordinate presentation and quick-reaction response, has been developed and is presently being confirmed with four remote viewers; #002 who was primarily responsible for developing the basic concept, and Nos. 009, 131, and 504 who are in the role of trainees with regard to this particular methodology. The procedure designed to minimize overlays coupled with use of a specifically designed acoustic-tiled featureless room with homogeneous coloring to minimize environmental overlay, and adoption of a uniform, limited monitor behavior role to minimize monitor overlay, constitute the basic methodology for noise reduction in our newly-developed approach to CRV.

With regard to mapping the <u>signal</u> characteristics of the CRV channel, a progressive multistage target acquisition process appears to be emerging. The stages outlined in Table 1 appear to track an increasing contact with the target site that takes place during the CRV process. An example of these stages of elaboration in a completely successful remote viewing would be the series:

- (1) Recognition and decoding of major gestalts
- (2) Achieving sensory contact with target

Land surrounded by water, an island

Humid sensation, tropical feeling

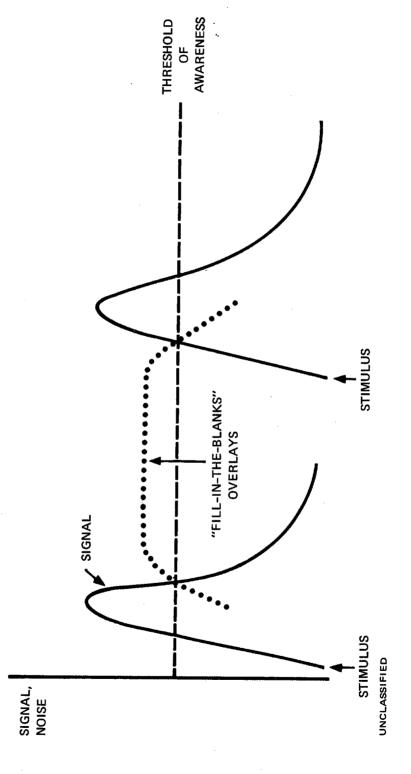


FIGURE 1 SCHEMATIC REPRESENTATION OF REMOTE VIEWER RESPONSE TO CRV SITUATION (U)

9

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- (3) Experiencing motion and mobility within target
- Rising up, a panoramic view
- (4) Recognition and decoding of minor signals while sustaining major gestalts
- Mountains on the island, a small port city on the water's edge
- (5) Decoding special characteristics of target
- Large areas devoted to agriculture
- (6) Analytical recognition and decoding of significant aspects of the target
- Some tourism, agriculture devoted primarily to sugar cane, main island in Fiji islands

Table 1

CRV STAGES OF TARGET ACQUISITION

- 1. Recognition and decoding of gestalts
- 2. Achieving sensory contact with target
- 3. Experiencing motion and mobility within target
- 4. Recognition and decoding of minor signals while sustaining major gestalts
- 5. Decoding special characteristics of target
- 6. Analytical recognition and decoding of significant aspects of the target

Knowledge of the above multistage process of target acquisition appears also to provide a filtering function, in that apparent data that does not emerge somewhat in this order tends to be overlay (e.g., immediate recognized image of the St. Louis Arch [Stage 6] as first response to coordinate presentation).

For the training procedure, in which feedback plays an essential role, a pool of several hundred target locations was prepared using

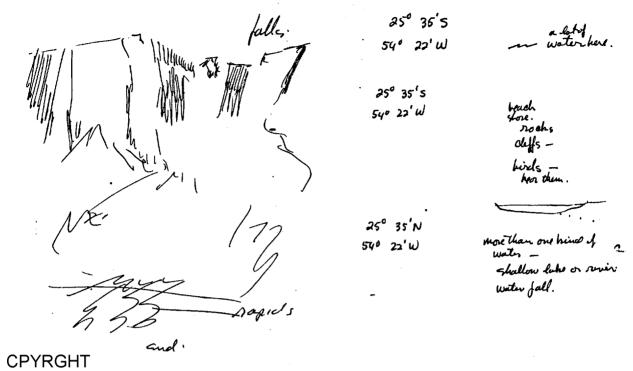
material from a large library of National Geographic magazines. The coordinates for the chosen sites were obtained from the Second Edition (Revised) of the <u>Times Atlas of the World--Comprehensive Edition</u>, Houghton Miflin Co., Boston (1971).

In a typical training session, a half dozen targets are chosen at random for use. In the early stages of the process the monitor makes himself aware of the target material he is using so that he can provide running feedback during the session. (We call this a Class C target protocol.) During this phase the monitor is allowed only a few stock phrases ("correct," "near the target," etc.) so as to minimize cueing and leading. Once some degree of apparent competence has been reached, the monitor is given targets to which he is blind (a Class B target protocol) so as to eliminate confounding of the results by potential cueing. In this case feedback information is accessed by both monitor and remote viewer only at termination of the CRV session. A training series with a given remote viewer generally consists of roughly a hundred of these trials spread out over a two-month period. The output of a sample successful trial is shown in Figure 2.

In detail, the training procedure is as follows:

- (1) The remote viewer and monitor seat themselves at opposite ends of a table, the former with a supply of paper and a pen, the latter with target folders (contents initially unknown) and reference atlases.
- (2) The remote viewer is instructed that the monitor will begin the CRV process by selecting a folder and reading aloud target coordinates printed on the outside. The remote viewer is to note down on paper any immediate impressions (which he may also express aloud*) and then, rather than embellishing on his first impressions, to ask for the coordinates to be read aloud again so that the original process may be repeated, etc., until a coherent picture of the site emerges.

 $^{^{\}star}$ The session is tape recorded.



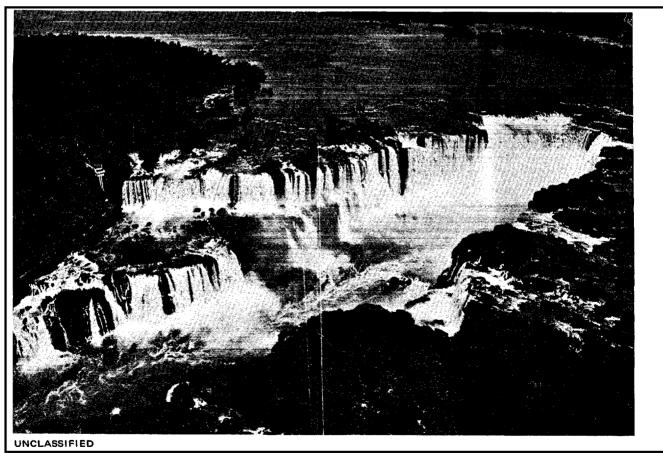


FIGURE 2 CRV RESPONSE TO IGUAZU FALLS, BRAZIL TARGET (U)

12

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- (3) Following these instructions, the monitor selects a folder and begins the process described above.
- (4) After one or more repetitions of the coordinates (each followed by a CRV response) leads to recognizable target characteristics, the folder is accessed by the monitor, and the atlas consulted (if necessary) in order to give feedback. In the Class B protocol this is the termination of the session. In the Class C protocol a line is drawn on the remote viewer's data sheet to separate the data thus generated from further data, since up to this point the data were generated in a double-blind protocol and can be objectively evaluated later as a test of target acquisition.
- (5) In the Class C protocol, having terminated the target acquisition "test" phase, feedback can now be given and/or further data solicited. The feedback given at this point is non-negative, ranging from "correct," through "near the target," to "you are at another target" (giving the remote viewer the benefit of the doubt). The monitor then has the option of terminating the viewing, asking for more detail ("there's something ten miles to the north that should be visible") or restarting the process when the viewer's original description did not correspond to the target site. (In the latter case the monitor can, of course, guide or cue the remote viewer into a correct response. This is acceptable in the non-test part of the sequence, however, and provides an opportunity to investigate whether such cueing procedures can be useful in operationally oriented applications in which one guides the remote viewer onto the target site with cues "a," "b," ... "f," and then asks for detail in a nearby region, or concerning an unknown, "g.")

To give an example, we present here a summary of results obtained with a remote viewer who was a relative neophyte with regard to CRV. He was exposed to this protocol, a few targets per session, over a severalday period, resulting in a data pool of 26 CRV target viewings. They were: Salt Lake Desert, Utah; Lake Erie; Chicago; Mono Lake; Aruba Island; Lake Okeechobee; Yount's Peak, Wyoming; Pitcairn Island; Pike's Peak;

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Los Angeles; Atlantic Ocean; Rio de Janeiro; Kansas plains; St. Peter and Paul Islands; Randall Dam, South Dakota; Lake Titicaca; Cape May; Niagara Falls; Munich; Amazon River; Midwestern plains; Venezuelan Peninsula; Sierra Blanca Mountain; Oregon Desert; Panama Canal; Puerto Rico.

Following the first pilot session of five, in which essentially immediate feedback was given (Class C protocol), the remaining twenty-one were carried out with delayed feedback (Class B protocol) and thus provided material that could be assessed objectively. As a first cut the targets can be categorized roughly into five groups (mountains, flats, water, cities, islands/peninsulas). The target/response matrix obtained in the series is as shown in Table 2. The probability of such an alignment

Table 2
DISTRIBUTION OF CRV TARGET/RESPONSE MATCHINGS

	Transcripts					
					Islands/	
Targets	Mountains	Flats	Water	Cities	Peninsulas	
Mountains	3	0	0	0	0	
Flats	0	1	1	1	0	
Water	0	0	6	0	0	
Cities	0	0	0	2	1	
Islands/Peninsulas	1	0	0	0	5	

occurring by chance alone can be calculated by a direct-count-of-permutations method (see Appendix), and leads to p=1/5!=0.0083. The distribution of responses is therefore statistically significant. Furthermore, beyond simple statistics, certain individual responses were exceptionally accurate during the acquisition "test" phase. In the final trial

in this series, for example, when the target coordinates were for Guayama in Puerto Rico, the viewer described a "fishing village on the southeast coast of a boat-shaped island," which is an entirely correct description of the locale at the target coordinates. He then drew an island, resembling Puerto Rico in both shape and orientation.

A secondary application of the target pool/training mode procedure is as an auxiliary calibration tool during operational CRVs. Immediately prior, during, or after an operationally-oriented task (which we designate Class A protocols), a National Geographic CRV can be used to determine whether a remote viewer is "on."

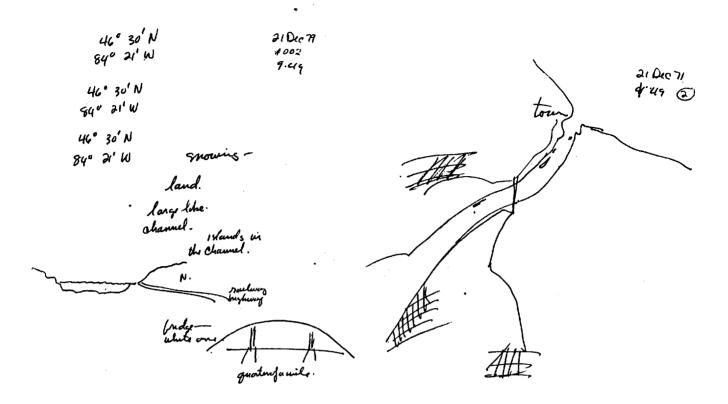
This procedure was used immediately following the third and final scan of one of the operational CRVs described in the next section of this report. Under Class B protocol (monitor blind to target, no feedback during session) coordinates for the Sault Ste. Marie Locks in the Soo Canal were given. The CRV response, shown in Figure 3, centered on a channel with islands in it, leading to a large lake, and traversed by a large white bridge, a result of high quality. Eventual feedback on the operational target of interest revealed matching quality.

B. CRV Applications

In this program SRI is charged with investigating U.S. capabilities in applied RV in order to provide data useful in assessing the threat potential of corresponding Soviet applications. Specifically, SRI has been tasked with examining a series of geographic coordinates using RV techniques with the goals of:

(1) Establishing the authenticity and reliability of the RV phenomenon.

^{*}DIA(DT) Statement of Work dated 28 March 1979 (SECRET, DNA-79-04633).



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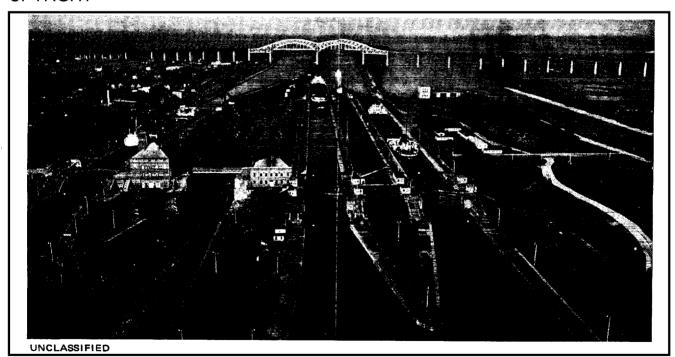


FIGURE 3 CRV RESPONSE TO SAULT STE. MARIE LOCKS IN SOO CANAL (Calibration Test) (U)

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- (2) Developing and refining experimental techniques and understanding of the RV phenomenon.
- (3) Establishing the best potential kinds of targets and best potential use of the RV phenomenon.

In response to these requirements SRI has pursued application tasks of interest to the client community. These tasks (Class A protocols) have been pursued during the time frame in which the reliability-improvement program of the previous section has been in effect. Therefore, the quality of response to these tasks provides an indirect measure of the efficiency of the reliability-improvement procedures.

The CRV tasks described below were carried out in response to quick reaction requirements set by a representative of the intelligence community (hereafter referred to as IC representative) involved in monitoring the progress of the work. During these scans all SRI personnel were kept blind to the target. The tasks and associated response data are outlined here in summary form. Complete documentation (transcripts, messages, evaluation, etc.) can be made available through SI/SAO channels of the contracting agency on a need-to-know basis.

SG1A 1.

- RV Session Dates: 22 June 1979 (Session 1); 5 July 1979 (Session 2).
- Remote Viewer: #009
- Interviewer: IC representative (Session 1);
 H. Puthoff (Session 2).

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Two scans were carried out on designated by an IC representative (during a site visit) to be a target of interest. For Scan 1, Viewer #009 was closeted alone with the IC representative—no other personnel were present. The target site was designated by coordinates only (latitude and longitude to seconds). All data generated during Scan 1

17

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were carried away by the IC representative. An evaluation was provided SRI in an electrical message via the SSO channel on 2 July 1979, and a copy of the data (with coordinates removed) was returned to SRI under separate cover. A second scan was then carried out with the same viewer on 5 July 1979, targeting not by coordinate, but on the basis of familiarity with the site established in Scan 1. Details can be made available through separate channels.

SG1A 2.

- RV Session Dates: 12 July 1979 (Session 1); 17 July 1979 (Session 2).
- Remote Viewer: #009
- Interviewer: H. Puthoff

It was arranged in advance that an SRI remote viewer would attempt to target on a site designated only on the basis of the following: On the day of viewing an IC representative, known to the viewer, would be carrying an envelope, inside of which were coordinates of a target of interest, location and function unknown even to him. This was to constitute an exercise in abstract targeting under conditions of maximum security.

Two scans were carried out on this basis on different dates.

The viewer's response centered on the description of a building of specific design, together with information on internal layout and activities, certain quite unique elements of which have been verified as being correct.

^{*}This "targeting-by-association" procedure mimics a previously successful experimental series. See H. Puthoff, et al., "Advanced Threat Technique Assessment (U)," Final Report, SRI Project 5309, SRI International, Menlo Park, CA (October 1978), SECRET.

3. Caribbean Site

- RV Session Dates: 14 December 1979 (Session 1); 17 December 1979 (Session 2); 18 December 1979 (Session 3); 21 December 1979 (Session 4); 28 December 1979 (Session 5).
- Remote Viewers: #698 (Session 1); #002 (Sessions 2-4); #009 (Session 5).
- Interviewer: H. Puthoff

A total of five remote viewing sessions, involving three remote viewers, was carried out on a Caribbean site designated by an IC representative to be a site of interest. Targeting was on the basis of coordinates supplied to SRI by an IC representative.

The analysis of this site has been completed. Each of the three viewers individually supplied pertinent, relevant data with regard to the target site, and their data taken together resulted in a target/transcript correspondence rating of 7 (given by user) on a 0-7 point evaluation scale shown in Table 3.

The results generated in these operational tasks to date, all obtained with remote viewers incorporating the procedures developed in the reliability-improvement program, appear to provide our first (and encouraging) evidence with regard to a possible upgraded level of performance. Further data needs to be generated, however, before a definitive assessment can be provided, and this requirement will be pursued during the remainder of the program.

Table 3

0-7 POINT EVALUATION SCALE FOR TARGET/TRANSCRIPT CORRESPONDENCE

- 7 = Excellent correspondence, including good analytical detail (e.g., naming the site by name), and with essentially no incorrect information.
- 6 = Good correspondence with good analytical information (e.g., naming the function) and relatively little incorrect information.
- 5 = Good correspondence with unambiguous unique matchable elements, but some incorrect information.
- 4 = Good correspondence with several matchable elements intermixed with incorrect information.
- 3 = Mixture of correct and incorrect elements, but enough of the former to indicate viewer has made contact with the site.
- 2 = Some correct elements, but not sufficient to suggest results beyond chance expectation.
- 1 = Little correspondence.
- 0 = No correspondence.

IV APPLICATION POTENTIAL

A. Introduction

Remote viewing, through the use of geographical coordinates as target designators, has in many cases provided meaningful descriptions of East-Bloc sites designated as targets by various sponsors, and therefore constitutes a potentially exploitable information source. As is generally true with human sources, however, the information is fragmentary and imperfect, and is therefore best utilized in conjunction with other resources. In this section we consider the potential for a broad-based integration of RV intelligence into the intelligence resource mix.

B. Present Intelligence Resources and their Use

The essence of intelligence is to provide support for the operational and decision making processes of the U.S. government by providing timely best-estimates concerning potential adversary capabilities and intent. Three categories of intelligence concerns are addressed in this vital function. They are:

- (1) Policy
 - Plans
 - Politics
 - Economics
- (2) Military Strategy
 - Order of battle
 - Force balance
 - Military operations

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- (3) Science and Technology
 - Military requirements
 - Weapons development
 - Facility construction
 - · Production and test

A proper assessment of each of these categories depends on the abilities of trained analysts to exploit fully the various data bases available. The commonly used data bases include communications intelligence (COMINT), human intelligence (HUMINT), photographic intelligence (PHOTINT), electronics intelligence (ELINT), signal intelligence (SIGINT), and literature intelligence (LITINT). The specific mix of the data bases used in addressing each of the intelligence categories varies from analyst to analyst depending on habits, organization policy, and propensities.

Table 4 indicates a commonly held view of the utility of the various data bases for supporting each of the three categories of intelligence concerns.

The utility of these intelligence data sources for providing pertinent, timely information is underscored by the designation of the applicability of the data source to the category of intelligence. There are data that provide a direct measure of information useful to the analyst, designated by DIRECT; data that provide an indirect measure of useful information, designated by IND; and data that are marginally useful, designated by an M.

Data designated as having direct usefulness to the analyst can be further subdivided into three subgroups as to their timeliness: subgroup (1) data provides prior knowledge of an important event or item; subgroup (2) data provides real-time information or near real-time information; and subgroup (3) data provides after-the-fact information.

Even the best possible use of the data sources shown in the preceding table are not sufficient in all cases to provide the analyst with definitive information. More often than not, the analyst will insist on corroborating

22

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Table 4

CONVENTIONAL INTELLIGENCE SOURCES

AND THEIR GENERAL APPLICABILITY TO INTELLIGENCE GATHERING

	Type of Intelligence					
Intelligence		Military	Science and			
Data Source	Policy	Strategy	Technology			
COMINT	Direct (1)	Direct (1)	Direct (1)			
HUMINT	Direct (1)	Direct (1)	Direct (2)			
PHOTINT	Ind.	Direct (2)	Direct (2)			
ELINT		- -	Direct (2)			
SIGINT	М	M	Direct (2)			
LITINT	Direct (3)	Indirect	Direct (1)			

NOTE: DIRECT* = Direct measure of intelligence information.

IND = Indirect measure of intelligence information.

M = Marginal measure of intelligence information.

-- = No measure of intelligence information.

information from another source of data, and all too often it is not known whether such commensurate information exists. In addition, there are inherent limitations in the data sources. These limitations are manifested in (1) the amount of time in which data can be collected, (2) the restricted area of coverage, (3) the difficulty in data collection at the "right" place, and (4) the sporadic nature and undetermined reliability of much of the information. Since many of these limitations cannot be overcome practically because of economic or technical reasons, it is useful to look to newly emerging concepts and technologies for additional intelligence source potential.

^{*}DIRECT knowledge can be obtained prior to the actual event (1), at the same time as the event (2), or after the event (3).

C. RV Intelligence

The subject of this report (RV phenomenon), developed to a high degree of reliability, would clearly constitute a new area of intelligence potential, both with regard to corroborating and supplementing information from other sources, and with regard to providing data not obtainable from other sources. This leads us to propose that RV and related phenomena be considered seriously as a new candidate in the intelligence arena, and that the consequences of the utilization of this source be examined.

To the extent that RV intelligence has been used to date, it appears that RV typically functions in a manner characteristic of the more conventional intelligence data sources. That is, RV provides, with various degrees of success, imagery information, descriptive information, and temporal and spatial tracking information. By virtue of data in the area of so-called precognition, or future remote viewing (FRV), the possibilities may extend to a capability of providing information on events, people, and places in advance of any of the conventional data sources. If this possibility is substantiated by further research, FRV could then be used to direct the use of conventional data sources, and thereby contribute to a more optimum use of available collection means.

As more substantive examples of the utility of RV, the following uses have been demonstrated in form if not in actuality:

- As related to COMINT Descriptions of communicators; descriptions of communicator's surroundings.
- As related to HUMINT Imagery from verbal descriptions; identification of potential HUMINT sources; identification of adversaries prior to encounter.
- As related to PHOTINT Imagery of equipment not visible to conventional means; imagery of future events, constructions, deployments.

24

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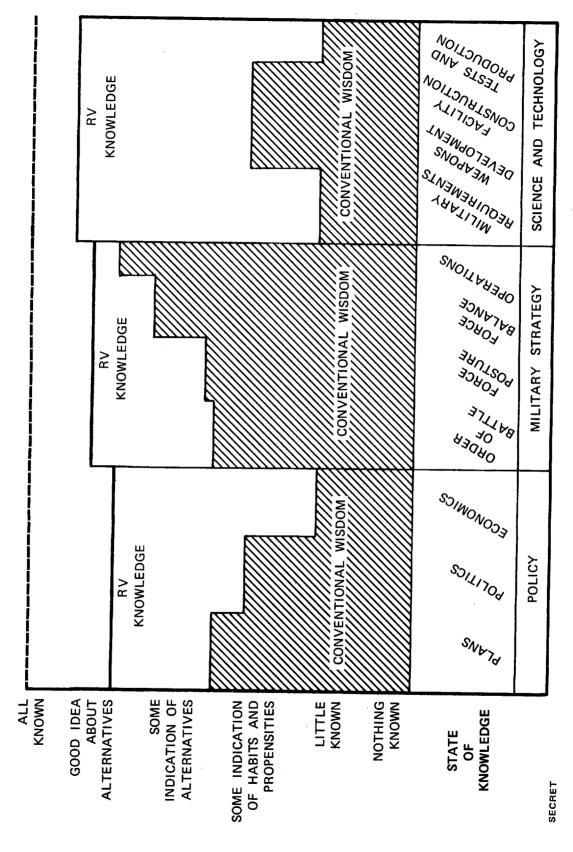
- As related to ELINT/SIGINT Descriptions of signals transmitted on covert links; decoding of signals.
- As related to LITINT More efficient data retrieval and analysis.

These uses of RV have been exploited only to a limited extent thus far. It is with pointed-purpose that additional uses are rapidly becoming integrated into the realm of possibility, however, and a fully-functioning RV capability could be expected to enhance intelligence assessments as diagrammed in Figure 4.

Thus, in summary it would appear that:

- RV could be used to provide important verifying information necessary to judge correctly a situation or event.
- RV could be used to direct the use of the more conventional data source collection systems so that the best complement of systems are available when and where needed.

A more comprehensive study of the integration of RV into the overall intelligence mix is nearly completed and will be presented in the following report.



POTENTIAL ENHANCEMENT OF INTELLIGENCE ASSESSMENTS DUE TO ADDITION OF RV DATA (U) FIGURE 4

Appendix

STATISTICAL PROCEDURE FOR FIRST-CUT ANALYSIS OF CRV RESULTS

A precise measure of the statistical significance of a matrix of target/transcript correspondences is given by a direct-count-of-permutations method of great generality. It is an exact calculation method requiring no approximations such as normality assumptions. Furthermore, the judging process that went into generating the matrix is not required to be independent transcript-to-transcript nor target-to-target. The only requirement is that no artifactual information is provided as to the order of targets and transcripts. In particular, it can be shown that if targets are used with replacement or are nonorthogonal (the case here), then the method applies even in the case in which there is trial-by-trial feedback and the target pool is known a priori to both remote viewer and interviewer. Thus the possibility of interviewer cueing or subject guessing based on a priori knowledge of the target pool is handled at a fundamental level by a statistical procedure that assumes the worst. The argument is as follows.

In the absence of knowledge as to which transcript was generated in response to which target, one observes that in setting up the target-transcript matrix there are n! possible ways to label the columns (transcripts), given any particular order of the rows (targets), and vice versa. Thus, there are n! possible matrices that could be constructed from the

C. Scott, "On the Evaluation of Verbal Material in Parapsychology: A Discussion of Dr. Pratt's monograph," <u>Jour. Soc. Psych. Res.</u>, Vol. 46, No. 752, pp. 79-90 (June 1972).

raw data, all of them equally likely under the null hypothesis that the viewer's remote viewing attempts produce nothing but vague and general descriptions and/or occasional chance correspondences with various target sites. Each matrix has its associated sum on the matrix diagonal corresponding to a possible alignment of targets.

The significance level for the experiment is then determined by counting the number of possible matrices that would yield a result (diagonal sum) equal to or better than that obtained for the matrix corresponding to the key, and dividing by n! This ratio gives the probability of obtaining by chance a result equal to or better than that obtained in the actual judging process. For the results shown in Table 2 in the body of the report, for example, we find, by direct computer count of the 5! matrices obtained by interchanging columns, that the probability of obtaining equal or better matching by chance is p = 1/5! = 0.0083.